REMARKS/ARGUMENTS

The rejection denies a claim for the benefit of priority to U.S. Provisional Application No: 60/243,708 filed on October 26, 2000. The rejection denies priority because the provisional application allegedly fails to enable the claimed invention, under 35 U.S.C. §112, first paragraph. For example, the rejection alleges that "no part of the provisional application appears to disclose the method steps shown in the Application at Fig. 7." Applicant respectfully submits that the proper test for priority is whether the claims in a U.S. application are entitled to the benefit of a provisional application (see MPEP 2100-180 and 2163.03(III)) and not whether the specification, e.g., Figure 7, finds support as seems to be alleged by the rejection. For example, Applicant respectfully notes that the claims of the present application are directed to an embodiment different than that illustrated in Figure 7. Thus, Applicant respectfully submits that alleging what may or may not be disclosed in the provisional application regarding Figure 7 can result in discrepancies in the priority determination when such an (incorrect) test is used.

Claims 1-5 are objected to because Claim 1 recites "a virtual microcontroller" in lines 2-3 and "a virtual microcontroller" in line 5. Thus, Applicant has respectfully amended independent Claim 1 to overcome this informality. Withdrawal of the objection is earnestly requested.

Claims 1-20 are objected to regarding the claim language "I/O read data" and "I/O read instruction." The rejection asserts that Claim 1 recites "wherein said I/O read data is followed by a conditional jump instruction," however, the rejection asserts that the disclosure of the invention is directed to an I/O read instruction (or "I/O read") followed by a conditional jump instruction that depends on the result of the I/O read. Applicant respectfully disagrees in view of the following rationale and explanation.

The instant application recites that I/O read information is transferred from the microcontroller to the virtual microcontroller that is used to provide the results of I/O reads to the virtual microcontroller (see instant application, page 26, lines 11-14). The virtual microcontroller waits for data to be transferred in order to obtain the I/O read information (see instant application, page 26, lines 14-16). When an instruction following an I/O read is a conditional jump instruction based on the result of the I/O read, the virtual microcontroller may not have enough time to properly compute the location of a conditional jump (see instant application, page 26, lines 17-19).

Accordingly, the virtual microcontroller uses the received data to obtain the I/O read information. When the instruction following the I/O read is a conditional jump, the virtual microcontroller may not have enough time to compute the location of the conditional jump. Thus, there is no misdescription, as

alleged by the rejection, because Claim 1 recites that the I/O read data is followed by a conditional jump instruction, as claimed which is mirrored in the detailed description by stating that "the instruction following the I/O read is a conditional jump". Thus, withdrawal of the objection is earnestly requested. Independent Claims 6 and 14 recite limitations similar to that of independent Claim 1 and withdrawal of the objection is similarly requested. Withdrawal of the objection for dependent claims is earnestly requested by virtue of their dependency.

Claims 1-20 are objected to because "the independent claims previously made clear that the virtual microcontroller and microcontroller generally execute the same instructions in lockstep using the same clocking signals, except when performing the claimed steps." Applicant respectfully points out that this limitation is unique to Claim 1 and not recited in independent Claims 6 and 14. For example, Claims 6 and 14 do not recite the same clocking signals, as claimed in independent Claim 1. Thus, withdrawal of the objection for Claims 6-20 is earnestly solicited since they do not have this limitation.

As per Claim 1, Applicant has respectfully amended Claim 1 to recite executing the same instruction using the same clocking signal, as claimed. Accordingly, the same instruction is executed by the microcontroller and the virtual microcontroller using the same clocking signal. Thus, the execution of the

same instruction is not limited to determination of whether to proceed with instruction execution at a next consecutive address or at a speculative conditional jump. Thus, withdrawal of the objection is earnestly solicited. Withdrawal of the objection for dependent claims is earnestly solicited by virtue of their dependency.

Claim rejections 35 U.S.C. § 112

Claims 1-20 are rejected, under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. For example, the rejection asserts that Claims 1, 6 and 14 recite "sending a conditional jump instruction to a virtual microcontroller." Applicant respectfully submits that the rejection improperly substitutes a misunderstanding of the recited claim limitation for what is actually claimed.

Independent Claims 1, 6 and 14 recite that the microcontroller sends I/O read data to a virtual microcontroller, and wherein the I/O read data is followed by a conditional jump instruction, as claimed. Nowhere does the claim recite that the conditional jump instruction is sent, as alleged by the rejection. Independent claims merely recite that the I/O read data is sent from the microcontroller to the virtual microcontroller, and that the I/O read data is followed by a conditional jump. Thus, Applicant respectfully disagrees with the rejection's rationale because it is clear what is being sent and what is not being sent. However, in the

interest of expediting prosecution of this case, Applicant has amended

independent Claims 1, 6 and 14 to further clarify what is being sent and what is

not being sent. Thus, withdrawal of the rejection is earnestly solicited.

Claims 1-20 are rejected, under 35 U.S.C. §112, second paragraph as

allegedly failing to set forth the subject matter which applicant regards as his

invention. Applicant respectfully submits that in view of the amendment to Claims

1, 6 and 14 and for reasons discussed and presented above, independent claims

are in compliance with 35 U.S.C. §112, second paragraph. Thus, withdrawal of

the rejection is earnestly requested. Dependent claims are in compliance with 35

U.S.C. §112, second paragraph by virtue of their dependency.

For the above reasons, the Applicant requests reconsideration and

withdrawal of these rejections under 35 U.S.C. §112.

CONCLUSION

In light of the above listed remarks, reconsideration of the rejected Claims 1-20 is requested. Based on the arguments presented above, it is respectfully submitted that Claims 1-20 overcome the rejections of record and, therefore, allowance of Claims 1-20 is earnestly solicited.

Please charge any additional fees or apply any credits to our PTO deposit account number: 50-4160.

Respectfully submitted,
MURABITO, HAO & BARNES LLP

Dated: Jan 3rd , 2008
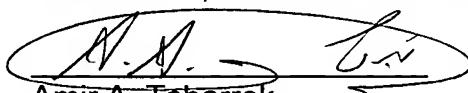
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